

**Conservation Planning for Southern Resident Killer Whales**  
**Prey Workshop Notes**  
**April 19, 2004**  
**Seattle Aquarium**  
**Seattle, Washington**

**Identifying Topics for Further Consideration**

Participants suggested topics for consideration and management strategies the group should focus on in their breakout sessions including:

- Focus on geographic areas where the salmon are doing well
- Think about what we can do to increase size
- How can we produce more fish with low toxin levels
- Discuss public education measures and how to get people on the watershed level to participate in recovery
- Look into bait fish as a factor in limiting salmon recovery; bait fish abundance
- Political will to implement recovery strategies
- Linking recovery strategies: chinook recovery and orca recovery
- Look at the interactions between prey abundance and toxicity, and whether whales who are not hungry can better withstand toxicity
- How to achieve quick medium sized increases as well as long-term annual increases
- More research on what orcas are eating
- Focus on management issues around geographic areas where orcas are eating

From these concepts, three breakout groups were created to further discuss management actions:

1. Linking orca and salmon recovery strategies with a geographic basis
2. Prey health
3. Education/political will

**REPORTS FROM WORKGROUPS**

After discussion within groups, each group presented its key recommendations to the larger group.

**Group 1. Linking orca and salmon recovery strategies with a geographic basis**

Research issues include:

- Further explore the correlation between Chinook and orcas;
- doing more scale collection to determine what orcas (N and S Residents) eat with a focus on seasonality;
- determining seasonal differences in orca prey

Management issues:

- The federal and state agencies responsible for orca recovery should link to ongoing efforts in salmon recovery, offering to provide more information about killer whales and their diet and help guide the priorities of the salmon recovery efforts in a direction that could also benefit orcas.

- Prioritize salmon recovery (as a food source for orcas) on key species when identified and on larger fish runs.
- There should be management actions protecting forage fish habitats as an approach for increasing salmon populations.
- NMFS should implement management actions that help the orcas find prey, including protecting foraging areas (by limiting vessel noise to reduce masking and stress). Both voluntary and regulatory options should be explored.
- Management efforts to identify and then protect orca prey in the winter are necessary. This appears to be a critical time.
- There should be educational efforts to acquaint the public about salmon as a food source for orcas and the interrelationship between these two species.

## **Group 2. Prey health**

### Management issues

- Efforts in salmon hatcheries should focus on producing larger fish, since these appear to be the preferred food source for orcas.
- Hatchery managers could broaden the return run timing to ensure more fish are present at more times of the year.
- There is a critical link between prey toxicity and orca health. Management efforts should focus on improving water and habitat quality. This would include taking a more proactive approach to regulating new chemicals.
- Cooperate on an international basis with Canadian efforts in all of these arenas.

### Research topics

- Examine the lice problem in farmed salmon to ensure the lice does not transfer to species the orcas ingest.
- Research on important salmon prey species (forage fish) with respect to abundance and health is needed. These fish may need more protection.
- Investigate the impact of Victoria BC untreated sewage dumping and the risk to prey
- Investigate the potential risk from toxic chemicals in the Fraser River and its influence on health of prey.

## **Group 3. Education/influencing political will**

This group recommended we focus on knowing our audience and communicating appropriately with them. They underscored the importance of engaging the investment community and bringing these people on board to fund and support orca recovery. The group agreed that a grass-roots approach is valuable, but that we also need to tap corporate leaders for financial support.

- Link the orca recovery campaign to other existing advertising/education campaigns.
- The group commented that to influence political will, we must work to redefine quality of life to include marine habitats, rather than in terms of increasing material possessions.
- The sustainability message is important, and we need to stress that we are keeping the environment healthy for both humans and whales. Education efforts should point out that by restoring habitat, we all benefit; resource users will benefit from strategies for saving orcas.

- Educational efforts and political efforts should focus on small municipalities that are located at the top of the watershed. It is important to show the link between orca survival and inland watersheds.